

ABSTRACT

Since the great number of elements constituting a unit pixel having an amplification function would hinder reduction of pixel size, unit pixel n,m arranged in a matrix form is comprised of a photodiode, a transfer switch for transferring charges stored in the photodiode, a floating diffusion for storing charges transferred by the transfer switch, a reset switch for resetting the floating diffusion, and an amplifying transistor for outputting a signal in accordance with the potential of the floating diffusion to a vertical signal line, and by affording vertical selection pulse ϕ_{Vn} to the drain of the reset switch to control a reset potential thereof, pixels are selected in units of rows.

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